

**REMARKS**

Initially, applicant would like to express his appreciation to Examiner Samuel A. Turner for the courtesies extended to attorney James Milton during a telephone conversation on December 8, 2006. During the telephone conversation, Examiner Turner explained that FIG. 3 would be properly corrected by reversing the orientation of beam splitter 24. Also, element 26 should be properly titled as a beam splitter and modulator.

Claims 1-12 and 14-15 are pending. Claims 1-12 were rejected under 35 U.S.C. §101. Claims 1-10 were rejected under 35 U.S.C. § 112, first paragraph. Claims 1-10 and 12 were rejected under 35 U.S.C. § 112, second paragraph. Claims 1-12 were rejected under 35 U.S.C. § 102(b). The drawings were objected to.

**Objection to the Drawings**

FIG. 3 was objected to because the Office Action states that beam splitter 24 and phase modulator 26 are confusing.

Applicant has attached hereto a replacement drawing sheet for FIG. 3 correcting the aforementioned errors.

In view of the foregoing, applicant respectfully requests the objection to the drawings under 37 CFR 1.121(d) be withdrawn.

**Rejection Under 35 U.S.C. § 101**

Claims 1-12 were rejected under 35 U.S.C. §101 because the Office Action states that the invention is directed to non-statutory subject matter.

Applicant has responded by amending claims 1 and 11.

**Rejection Under 35 U.S.C. § 112**

Claims 1-10 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description.

Applicant has responded by amending claim 1.

Claims 1-10 and 12 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has responded by amending claims 1-2 and 10-12.

Rejection Under 35 U.S.C. § 102(b)

Claims 1-12 were rejected under 35 U.S.C. §102(b) as being anticipated by Noureldin et al., "Computer Modelling of Microelectronic Closed Loop Fiber Optic Gyroscope", 1999 IEEE, May 9-12, 1999.

Applicant has avoided this ground of rejection for the following reasons.

Applicant's claim 1, as amended, now recites,

"computing, via digital signal processing, one or more performance parameters of a fiber optic gyroscope to determine a relationship between a performance parameter and a physical parameter associated with fiber optic gyroscope components through employment of a closed-loop transfer function based on at least one characteristic of:

one or more optical components of the fiber optic gyroscope; and  
one or more electrical components of the fiber optic gyroscope".

Noureldin does not teach this limitation. Instead, Noureldin discloses a FOG with analog electronics, e.g., AC-Bias Modulator, as shown in FIG. 1. By contrast, applicant's claim 1 recites, "computing, via digital signal processing, one or more performance parameters of a fiber optic gyroscope ... ". Thus, Noureldi is missing the "digital signal processing" element, as recited in applicant's claim 1.

In view of the foregoing, applicant submits that Noureldin does not describe each and every element of claim 1, and therefore claim 1 is not anticipated by Noureldin. Since claims 2-12 depend from allowable claim 1, these claims are also allowable over Noureldin.

Independent claim 11 has a limitation similar to that of independent claim 1, which was shown is not taught by Noureldin. For example, claim 11 recites, "means in the one or more storage media for computing, via digital signal processing, one or more

performance parameters of a fiber optic gyroscope to determine a relationship between a performance parameter and a physical parameter associated with fiber optic gyroscope components through employment of a closed-loop transfer function based at least one characteristic ... ”. Noureldin does not teach this limitation for the above-mentioned reasons. Therefore, claim 11 is likewise allowable over Noureldin. Since claim 12 depends from claim 11, this dependent claim is also allowable over Noureldin.

#### New Claims

New claims 14-15 have been added. Claim 14 is substantially similar to the canceled claim 13. Claim 15 provides a limitation directed to the coefficient of random walk. No new matter has been added.

Conclusion

It is respectfully submitted that the Office Action's rejections have been overcome and that this application is now in condition for allowance. Reconsideration and allowance are, therefore, respectfully solicited.

In view of the above amendments and remarks, allowance of all claims pending is respectfully requested. If a telephone conference would be of assistance in advancing the prosecution of this application, the Examiner is invited to call applicants' attorney.

Respectfully submitted,



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